

IN THE CLAIMS

1 (Currently Amended). A method comprising:
forming an arrayed waveguide grating having an array of waveguides; and
arranging a plurality of heaters to provide a temperature gradient across said array of waveguides, said heaters extending along the length of said waveguides.

2 (Original). The method of claim 1 including forming an arrayed waveguide grating as a planar light wave circuit.

3 (Original). The method of claim 2 including forming said arrayed waveguide grating on the first side of said circuit and forming said heaters on the opposite side of said circuit.

4 (Original). The method of claim 3 including forming said heaters in generally the same configuration as said waveguides.

5 (Original). The method of claim 4 including positioning said heaters on the opposite side of said circuit under said waveguides and directly aligned beneath said array of waveguides.

6 (Original). The method of claim 1 including enabling said heaters to be selectively actuatable.

7 (Original). The method of claim 6 including providing laser fuses for said heaters.

8 (Original). The method of claim 7 including opening some of said fuses to select the heaters to be operated.

9 (Original). The method of claim 1 including positioning said heaters to provide a desired temperature gradient across said array of waveguides.

10 (Currently Amended). An arrayed waveguide grating comprising:
a support structure;
an array of waveguides on one side of said support structure; and
at least two heaters positioned so as to provide a temperature gradient across said array of waveguides, said heaters extending along the length of said waveguides.

11 (Original). The grating of claim 10 wherein said heaters are on one side of said structure and said array of waveguides is on the opposite side of said structure.

12 (Original). The grating of claim 11 wherein said heaters are selectively actuatable.

13 (Original). The grating of claim 10 wherein said structure is a planar light wave circuit.

14 (Original). The grating of claim 10 wherein said heaters are directly below said array of waveguides.

15 (Original). The grating of claim 10 wherein said heaters are arranged in generally the same configuration as said array of waveguides.

16 (Original). The grating of claim 15 wherein less heaters are provided than waveguides.

17 (Original). The grating of claim 10 wherein said heaters include laser actuatable fuses.

18 (Currently Amended). An arrayed waveguide grating comprising:
a support structure;
an array of waveguides; and
an array of heaters arranged in substantially the same configuration as said array of waveguides, said array of heaters being positioned on one side of said support structure and

said array of waveguides being positioned on the opposite side of said support structure, said heaters extending along the length of said waveguides.

19 (Original). The grating of claim 18 wherein said heaters are selectively actuatable.

20 (Original). The grating of claim 19 wherein said heaters include actuatable fuses.

21 (Original). The grating of claim 20 wherein said fuses are laser actuatable fuses.

22 (Original). The grating of claim 18 wherein said structure is a planar light wave circuit.

23 (Original). The grating of claim 18 wherein said array of heaters is arranged substantially directly below said array of waveguides.

24 (Original). The grating of claim 23 wherein there are less heaters than waveguides.